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10/049,623	02/22/2002	Yoichiro Tanaka	219861USOPCT	7766

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EXAMINER	
MERCIER, MELISSA S	
ART UNIT	PAPER NUMBER
1615	

NOTIFICATION DATE	DELIVERY MODE
09/28/2007	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No.	Applicant(s)	
	10/049,623	TANAKA ET AL.	
	Examiner	Art Unit	
	Melissa S. Mercier	1615	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *13 October 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *8,9 and 23-40* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☐ Claim(s) *8,9 and 23-40* is/are rejected.

7)☒ Claim(s) *39-40* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Change of Examiner

The examiner assigned to the instant application has changed. The new examiner is Melissa Mercier. Contact information is provided at the end of this Office Action.

Summary

Receipt of Applicants Arguments and Amended Claims filed on October 13, 2006 is acknowledged. Claims 8-9 and 23-40 are pending in this application. The indication of allowable subject matter is withdrawn. Rejections and/or objections not reiterated from previous Office Actions are hereby withdrawn. The following rejections and/or objections are either reiterated or newly applied. They constitute the complete set presently being applied to the instant application.

Claim Objections

Claims 39-40 are objected to because of the following informalities: nitride is spelled incorrectly in the fifth line of the claim; the particle is listed as boron nitride instead of boron nitride. Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

Claims 8-9 and 23-40 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

It is unclear what a "water-containing powder composition" is. Applicant has not defined the term in the specification in a manner allowing one to ascertain the intended meaning. The examiner is interpreting the limitation to be a powder composition with water.

Additionally, it is unclear what an "at least cosmetically acceptable ingredient" is. It appears to be a typographical error. The examiner is interpreting the limitation to be "at least **one** cosmetically acceptable ingredient".

Regarding claims 37-38 and 39-40, it is unclear what applicant is claiming by metallic soaps, oil agents, mica titanium, silk powder and mica titanium coated with titanium oxide powder. The specification does not define the terms and to the examiners knowledge they are not art recognized for their intended functions.

Claims 39-40 recite the limitation "the hydrophilic particle" in line 1. There is insufficient antecedent basis for this limitation in the claim. The independent claims, 8 and 9, respectively do not require or recite hydrophilic particles.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 8-9 and 23-40 rejected under 35 U.S.C. 103(a) as being unpatentable over Tanaka (JP-04-001118).

Tanaka describes a cosmetic characterized by a pressure-collapsible flexible resin capsule comprising a water and/or moisture-retaining powder. The pressure collapsible flexible resin capsules are designed in such a manner that their capsules become collapsed by the pressure applied by the fingers or a sponge during a make-up application so that the contained water and/or moisturizing content becomes released

(page 6, last paragraph). On page 8, the last paragraph, a pressure-collapsible flexible resin capsule comprising water and a moisture-retaining ingredient is taught wherein the moisture-retaining ingredient is selected from a list of ingredients comprising xanthan gum and carrageenan, which are included in the list of water-soluble gallants of the instant application. Tanaka also teaches that he ingredient is not limited to those descried in the patent and is only required to be soluble to water, alcohol, or polyhydric alcohol and to exhibit skin moisturizing properties.

The 2nd and 3rd paragraphs on page 9 further teach that the composition comprises a shell-forming resin, insoluble in water, comprised of an inorganic fine powder selected from a list of ingredients that include ultra fine particulates of anhydrous silica wherein the grain diameter of the powder is ½ or less of the capsule size, preferably about 0.01-2 pm ingredient. This disclosure reads on the required hydrophobic particles used to coat the gel core.

Absent from the cosmetic preparation taught by Tanaka is the freeze-shattering limitation as claimed in claims 23 and 29-32. However, there is no showing by way of working examples or criticality that this limitation demarks a patentable distinction over what has already been patented in the art. Thus one of ordinary skill in the art would have been motivated to use the capsules taught by Tanaka because they are rupturable and the components are release upon pressure, furthermore, they appear to offer the same benefits in terms of ease of use, smooth feel, skin sensation, and moisturizing as those described in the instant application. The Tanaka reference clearly reads on a cosmetic preparation comprising hydrophobic particle materials; however, it does not

speak to the actual particle sizes as claimed in claims 24, 27, 30, and 33. Absent any evidence to the contrary, these materials are deemed to have appropriate size diameters. Applicant is reminded that where the general conditions of the claims are met, burden is shitted to applicant to provide a patentable distinction.

Response to Arguments

Applicant's arguments have been fully considered but they are not persuasive. Applicant argues, The Examiner has pointed to the disclosure on page 9, where it appears that between the core and polymer, an additional coating of inorganic fine powder is applied. It should be noted, however, that of those materials listed on page 9 of the JP'118 disclosure none of them are hydrophilic particles treated with a hydrophobicizing agent as defined in the claims. This makes sense because these materials that JP ' 118 discloses are simply materials provided between the actual coating (i.e., shell-forming resin) and the core and is unlike the coating of the present claims. The examiner disagrees. Based on the teachings of Tanaka, the resin capsules must be insoluble to water and/or the content and must also have sufficient impermeability. Tanaka also discloses the invention is not limited to the particular substances disclosed on page 9 but an entire class of substances which would meet the criteria, which the instantly claimed components meet. Additionally, Tanaka discloses the inorganic fine powder is present mainly at the boundary between the inclusion and the shell forming resin ingredient while contained within the resin. It contributes to suppressing the shell strength, which applicant also claims as a benefit of their invention.

Claims 8-9 and 23-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Reyes (US Patent 3,405,071), in view of Deubzer et al. (US Patent 6,251,313).

Reyes teaches microcapsules and a process of making microcapsules comprising an outer hydrophobic polymer layer grafted onto a gelled hydrophilic polymer containing an encapsulated polar solution (column 1, lines 10-42; col. 2, line 3-35, Examples). The hydrophilic polymer, in the internal phase, is gelled to form a microscopic particle or core containing the aqueous solution to be encapsulated. Suitable gellable hydrophils include, for example, agar agar, alginic acid and derivatives, casein, starch, locust bean gum, polyvinyl alcohol and other gellable colloids. Where alkali solutions are being encapsulated, hydrophilic colloids such as natural gum, starch and the like may be in the formulation to increase the initial water holding capacity (column 4, lines 24-33). Reyes describes suitable hydrophobic polymers, for example, vinyl, acrylate, styrene, polyethylene, polypropylene polymers, natural and synthetic rubbers, cellophane and cellulose derivatives. The polymeric materials should exhibit stability (column 3, lines 20-42; column 4, lines 12-23). According to Reyes, to produce microcapsules, which are water-resistant, or water vapor impermeable, it is essential that the grated monomer or polymer forming the outer surface of the microcapsule product be a hydrophobic material (column 4, lines 1-5). As a particular example of the process, Figure 1 demonstrates an emulsion formedin step 10 comprising a solution of gellable hydrophilic polymer and aqueous

solutiongoes the internal phase and an immiscible organic or nonpolar solvent containing a hydrophobic polymer-forming monomer and a hydrophobic polymer as the external phase (column 4, lines 6-12). Likewise, Figure 2 demonstrates a technique utilizing hydrophilic materials that comprise microscopic particles of casein, agar agar, alginica cid derivatives such as sodium alginate, starch, locust bean gum, polyvinyl alcohol and like gellable colloids (column 4, line 66 - column 5, line 6). Example 1 at column 5 demonstrates a water-in-oil emulsion incorporating polybutene. After thoroughly mixing under nitrogen, casein and triethanolamine were added to result in casein particles containing appreciable amounts of polybutene. Reyes do not explicitly teach the instant particle diameters. However, in the absence of showing the criticality of the instant particle diameter, it is the position of the Examiner that it is deemed obvious to one of ordinary skill in the art to determine suitable particle diameters through routine or manipulative experimentation to obtain optimal results, as these are indeed variable parameters attainable within the art. The prior art clearly recognizes and teaches microcapsules wherein hydrophilic polymeric materials are coated with hydrophobic particles.

Regarding the 'freeze-shattering' of the gel, no criticality is seen in the use of Applicant's freeze shattering of the gel since the prior art teaches obtaining a similar capsule that releases the components upon pressure. Moreover, Reyes teaches capsule formulating techniques involving the use of nitrogen (see Example 1). Reyes teaches microcapsules formed of an outer hydrophobic polymer layer grafted onto a gelled hydrophilic polymer containing an encapsulated polar solution.

Reyes teach that the coated microcapsules are used in the paper industry whereby depending on the materials to be encapsulated, markings are made by application of pressure (column 2, line 27-62). Reyes do not teach that the microcapsule is used for cosmetic applications.

Deubzer discloses a process for the preparation of microencapsulated products, such as microcapsules having shell walls of organopolysiloxane surrounding a solid or liquid core material, wherein the microcapsules are used for various applications including cosmetics, care products, coatings and paper and construction industries (column 6, lines 15-25; Abstract). Materials to be encapsulated include water and water-soluble materials such as gelatin, agar, pectins, celluloses and the like (column 3, lines 47-54; column, lines 57-60). The microcapsules are used in cosmetics and are comprised of a particle-powder such that when pressure is applied, oily contents are released (column 6, lines 21-46).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the coated microcapsules of Deubzer et al. within the microcapsules of Reyes, because Deubzer et al. explicitly teach a coated microcapsule formulation that encapsulates solid/liquid materials that is advantageously used for multiple applications, including cosmetic applications, as well as paper and construction industries. The expected result would be an improved, coated microencapsulated product that is conveniently employed in an array of applications for versatility of use and ease for the consumer.

Response to Arguments

Applicant's arguments have been fully considered but they are not persuasive. Applicant argues that the coating process disclosed by the prior art is different from that of the instant claims, however, it is noted that applicant has not claimed a specific coating process but rather the particles being coated, which would allow for any method currently known and acceptable in the art.

Conclusion

No claims are allowable. Due to the new grounds of rejection presented in this office action, this action is made Non-Final. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melissa S. Mercier whose telephone number is (571) 272-9039. The examiner can normally be reached on 7:30am-4pm Mon through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Woodward can be reached on (571) 272-8373. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MSMercier

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